

CLAIM

1. An optical waveguide comprising:

5 a first waveguide having a common transmitting and receiving port at one side and a receiving port at the other side, extending linearly, and able to guide an optical signal in bi-direction, and

a second waveguide branching off from said first waveguide so as to make an acute angle with said receiving port, coupling said first waveguide at one side, having a transmitting port at the other side, and guiding an optical signal to said first waveguide.

2. An optical waveguide as set forth in claim 1, wherein said first waveguide is formed with a dimension able to guide a plurality of mode of the optical signal.

3. An optical waveguide as set forth in claim 1, wherein said second waveguide is formed with a dimension of said one side which is coupled to said first waveguide so as to make smaller than the other side.

20 4. An optical transmitting and receiving module coupled with an optical fiber, a light emitting element and a light receiving element via an optical waveguide comprising:

a first waveguide coupling said optical fiber at one side and a light receiving element at the other side and extending linearly, and

a second waveguide branching off from said first waveguide so as to make an acute angle with said other side of said first waveguide and coupling said first waveguide at one side and a light emitting element at the other side.

5 5. An optical transmitting and receiving module as set forth in claim 4, wherein said first waveguide is formed with a dimension able to guide a plurality of mode of said optical signal.

10 6. An optical transmitting and receiving module as set forth in claim 4, wherein said second waveguide is formed with a dimension of said one side which is coupled to said first waveguide so as to make smaller than said other side.

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